

U.S. Divisional Application of Serial No. 09/309,001, filed May 10, 1999

CLEAN VERSION OF CLAIMS

33. A fastener for a plastic bag, comprising:
a male track including a male profile and a first fin portion; and
a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.
34. The fastener of Claim 33, wherein said first and second fin portions are attached.
35. The fastener of Claim 34, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.
36. The fastener of Claim 33, wherein said first resin is prepared in the presence of a metallocene catalyst.
37. The fastener of Claim 33, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.
38. The fastener of Claim 37, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

39. The fastener of Claim 37, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

40. The fastener of Claim 33, wherein at least one of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

41. The fastener of Claim 33, wherein at least one of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

42. The fastener of Claim 41, wherein at least one of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

43. The fastener of Claim 33, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

44. The fastener of Claim 33, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

45. (Once Amended) A fastener for a plastic bag, comprising:

a male track including a male profile and a first fin portion; and

a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin selected from the group consisting of an ultra low density polyethylene, a very low density polyethylene, and a metallocene-catalyzed polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at

least one of said fin portions comprising from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.

46. The fastener of Claim 45, wherein said first and second fin portions are attached.

47. The fastener of Claim 46, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

48. The fastener of Claim 45, wherein said first resin is an ultra low density polyethylene.

49. The fastener of Claim 45, wherein said first resin is a very low density polyethylene.

50. The fastener of Claim 45, wherein said first resin is a metallocene-catalyzed polyethylene.

51. The fastener of Claim 45, wherein said first resin has a polydispersity of from about 1.5 to about 4.

52. The fastener of Claim 45, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.

53. The fastener of Claim 52, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

54. The fastener of Claim 52, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

55. The fastener of Claim 54, wherein each of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

56. The fastener of Claim 45, wherein at least one of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

57. The fastener of Claim 45, wherein at least one of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

58. The fastener of Claim 57, wherein at least one of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

59. The fastener of Claim 45, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

60. The fastener of Claim 45, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

93. A fastener for a plastic bag, comprising:
a male track including a male profile and a first fin portion; and
a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin.

94. The fastener of Claim 93, wherein said first and second fin portions are attached.
95. The fastener of Claim 94, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.
96. The fastener of Claim 93, wherein said first resin is prepared in the presence of a metallocene catalyst.
97. (Once Amended) The fastener of Claim 93, wherein said first resin is a metallocene-catalyzed linear low density polyethylene.
98. The fastener of Claim 93, wherein at least one of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.
99. The fastener of Claim 98, wherein at least one of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.
100. The fastener of Claim 98, wherein at least one of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.
101. (Once Amended) The fastener of Claim 100, wherein at least one of the fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.
102. The fastener of Claim 93, wherein each of the fin portions comprises from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin.
103. The fastener of Claim 102, wherein each of the fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

104. The fastener of Claim 103, wherein each of the fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

105. The fastener of Claim 103, wherein each of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

106. (Once Amended) The fastener of Claim 105, wherein each of the fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

107. The fastener of Claim 93, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

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108. The fastener of Claim 93, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

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109. (Once Amended) A fastener for a plastic bag, comprising:
a male track including a male profile and a first fin portion; and
a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin selected from the group consisting of an ultra low density polyethylene, a very low density polyethylene, and a metallocene-catalyzed linear low density polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fins comprising from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

110. The fastener of Claim 109, wherein said first and second fin portions are attached.

111. The fastener of Claim 110, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

112. The fastener of Claim 109, wherein said first resin is an ultra low density polyethylene.

113. The fastener of Claim 109, wherein said first resin is a very low density polyethylene.

114. The fastener of Claim 109, wherein said first resin is a metallocene-catalyzed polyethylene.

115. The fastener of Claim 109 wherein said first resin has a polydispersity of from about 1.5 to about 4.

116. The fastener of Claim 109, wherein at least one of said first and second fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

117. The fastener of Claim 109, wherein at least one of said first and second fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

118. The fastener of Claim 117, wherein at least one of said first and second fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

119. The fastener of Claim 109, wherein each of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

120. The fastener of Claim 119, wherein each of the fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

121. The fastener of Claim 119, wherein each of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

122. The fastener of Claim 121, wherein each of said first and second fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

123. The fastener of Claim 109, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

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124. The fastener of Claim 109, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

134. A fastener for a plastic bag, comprising:
a male track including a male profile and a first fin portion; and
a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions is made from an ultra low density polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 25 to about 75 wt.% of said first resin, and from about 25 to about 75 wt.% of said second resin.

135. The fastener of Claim 134, wherein said first and second fin portions are attached.